Claims:

1. A medical imaging system comprising:

a base unit including an electronic display;

a remote imaging transducer connected to the display unit via a flexible cable;

the cable including a plurality of signal transmission lines;

each signal transmission line including a twisted pair of conductors; and

each conductor connected at a first end to the transducer, and at a second end to the base unit.

2. The system of claim 1 wherein the cable includes an optically transmissive element connected at one end to an illuminator, and operable to transmit light to a subject imaged by the transducer.

3. The system of claim 2 wherein each of the twisted pairs is wrapped about the optically transmissive element.

4. The system of claim 1 wherein the transducer is a photosensitive electronic device.

5. The system of claim 4 wherein the photosensitive electronic device is a CCD.

6. The system of claim 1 wherein the transducer is an ultrasound element.

7. The system of claim 1 wherein the conductors of each twisted pair are of a common wire gauge, and are each helically would about each other.

8. The system of claim 1 wherein the twisted pairs are evenly spaced apart from an axis defined by the core.

9. A medical imaging system comprising:

a base unit including an electronic display;

a remote imaging transducer connected to the display unit via a flexible cable;

the cable including a plurality of high-speed signal transmission lines; and

each signal transmission line including a pair of conductors coupled for low voltage differential signal transmission.

10. The system of claim 9 wherein the transmission lines are sufficiently high speed that they are capable of data rates of at least 100 Mbits per second.

11. The system of claim 9 wherein the transmission lines are twisted pairs.

12. The system of claim 9 wherein the cable includes an optically transmissive element connected at one end to an illuminator, and operable to transmit light to a subject imaged by the transducer.

13. The system of claim 12 wherein each of the signal transmission lines is wrapped about the optically transmissive element.

14. The system of claim 9 wherein the transducer is a photosensitive electronic device.

15. The system of claim 9 wherein the transducer is an ultrasound element.

16. The system of claim 9 wherein the conductors of each signal transmission line are of a common wire gauge, and are each helically wound about each other.

17. The system of claim 9 wherein the signal transmission lines are evenly spaced apart from an axis defined by the core.

18. A method of medical imaging comprising the steps:

positioning a transducer adjacent a patient;

generating an electrical signal in the transducer to represent an image;

transmitting the signal via a flexible cable connected to the transducer base unit, including transmitting separate signals via a plurality of pairs of high speed conductors, employing low voltage differential signal transmission; and

in the base unit, displaying an image based on the signal.

19. The system of claim 18 including transmitting at a data rate of at least 100 Mbits per second.

20. The method of claim 19 wherein transmitting signals includes transmitting signals via twisted pairs of wires.

21. The method of claim 19 including illuminating a subject portion of the patient imaged by the transducer via an optical conduit in the cable.

22. The method of claim 19 wherein generating an electrical signal in the transducer includes forming an image on a photosensitive electronic device.

23. The method of claim 19 wherein generating an electrical signal in the transducer includes receiving emitted ultrasound energy.